

## MEMORANDUM

TO: Board of Environmental Protection

FROM: Dana Murch, Dams Supervisor  
Bureau of Land & Water Quality

DATE: September 20, 2001

RE: Posting to Public Hearing: Chapter 585, Dissolved Oxygen Requirements for Rivers and Streams (Repeal and Replace Existing Chapter 585)

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### **Statutory and Regulatory References**

38 MRSA § 341-D provides that “the Board shall adopt, amend or repeal reasonable rules and emergency rules necessary for the interpretation, implementation and enforcement of any provision of law that the Department is charged with administering.”

38 MRSA §§ 464 et. seq. establish Maine’s Water Classification Program and set forth water quality standards for the State’s surface waters. Included in these standards are designated uses, numeric criteria and narrative criteria. Under the narrative criteria for Class AA, A, B and C rivers and streams, these waters shall be of sufficient quality to support all indigenous aquatic species, including indigenous species of fish.

38 MRSA § 465(4)(B) provides that “The Board shall promulgate rules governing the procedure for designation of [salmonid] spawning areas. Those rules must include provision for periodic review of designated spawning areas and consultation with affected persons prior to designation of a stretch of water as a spawning area.”

### **Location and Applicability**

This rule will be applicable to rivers and streams statewide.

### **Rulemaking History**

This rule has been under development for several years.

On August 19, 1999, the Board held a public hearing on an earlier version of this rule. The proposed rule had been developed through an informal stakeholder process involving meetings and consultations with affected dam owners and waste discharge licensees, EPA, the Penobscot Indian Nation, and various NGO's and other interested parties.

In early October of 1999, the Department initially asked that the Board adopt a final rule that had been revised based on comments received during and following the August public hearing. The Department then asked that the Board delay adoption of a final rule to allow time for the Department and other affected parties to review new data that had been recently collected on dissolved oxygen levels in Gulf Island Pond on the Androscoggin River. Gulf Island Pond is one of the riverine impoundments that would be affected by the rule. Finally, on October 26, 1999, the Department withdrew the rule from consideration, pending further review of the available data and discussions with the affected parties.

Since October of 1999, several additional meetings have been held with various stakeholders, and the Department has undertaken an extensive analysis of the dissolved oxygen situation in Gulf Island Pond. The Department is now prepared to resume the rulemaking process. Due to the passage of time, the process must be re-started as if this rule were being proposed for the first time; for this reason, the Department is again asking that the rule be posted to public hearing.

### **Description and Issues**

The proposed rule covers the same areas as did the version initially proposed in 1999 but has been significantly re-written and re-organized to improve readability and meet current drafting guidelines. The proposed rule has also been revised to address several deficiencies that have been identified in the initial version.

In brief, the proposed rule does three things. First, the rule adopts EPA-required criteria for dissolved oxygen levels in rivers and streams for the support of all life stages of indigenous fish. Second, the rule clarifies the procedures for identifying and designating fish spawning areas, as set forth in the existing Chapter 585 rule. Third, the rule specifies where dissolved oxygen levels will be measured in riverine impoundments. Upon adoption, the proposed rule will repeal and replace the existing Chapter 585 rule.

The only provision of the rule that has generated significant comment to date deals with dissolved oxygen levels in riverine impoundments. The Department has identified a handful of impoundments in the State, all of which are created by hydroelectric generating dams, where current dissolved oxygen standards are not met in bottom waters due to thermal stratification or natural topographic features that inhibit mixing of the impounded waters. These impoundments include: Gulf Island Pond on the Androscoggin River; Dolby Pond on the West Branch Penobscot River; the Ft. Halifax and Burnham impoundments on the Sebasticook River; the Old Falls and West Kennebunk impoundments on the Mousam River; and possibly several impoundments on the lower Salmon Falls River.

Under Maine's Water Classification Program, Class GPA lakes do not have to meet specific dissolved oxygen standards. To the extent that the waters in riverine impoundments do not mix due to thermal stratification or natural topographic features, these impoundments function like lakes. Therefore, under the proposed rule, these impoundments are treated like lakes and will not have to meet dissolved oxygen standards below the point of thermal stratification or topographic isolation.

The Department believes that the approach taken in the proposed rule to measure compliance with dissolved oxygen criteria in riverine impoundments is scientifically sound and fully protective of water quality. EPA, which has to approve all changes in Maine's water quality standards, has concluded that such an approach is reasonable and would be approved.

To the best of the Department's knowledge, if the proposed rule is adopted, the only riverine impoundment that under current conditions will still not meet dissolved oxygen standards is Gulf Island Pond. Additional reductions in point source and non-point source pollutant loading and/or additional mitigation measures (e.g., a second oxygenation system) will be needed to bring Gulf Island Pond into compliance with dissolved oxygen standards.

### **Public Hearing and Rulemaking Schedule**

The Department requests that a public hearing be held on the proposed rule and suggests the following rulemaking schedule:

- November 1, 2001                      Public Hearing.
- November 30, 2001                  Deadline for comments.
- January 3, 2002                      Board action on final rule.

### **Estimated Time of Presentation**

10 minutes.

### **Attachments**

- Proposed Chapter 585, Dissolved Oxygen Requirements for Rivers and Streams (dated 08/21/2001).
- Existing Chapter 585, Identification of Fish Spawning Areas and Designation of Salmonid Spawning Areas (Effective Date: February 18, 1989).

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